

terephthalic acid with diethylene glycol, ethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol, and 1,6-hexanediol or a mixture thereof;

isophthalic acid with diethylene glycol, ethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol, and 1,6-hexanediol or a mixture thereof; or

one or both of succinic and adipic acids with one or more compounds of the formula  $\text{HOCH}_2(\text{CR}^3\text{R}^4)_n\text{CH}_2\text{OH}$ , wherein  $\text{R}^3$  and  $\text{R}^4$  are hydrogen or alkyl containing 1 to 4 carbon atoms and  $n$  is 0 or an integer of 1 to 10.

5. The process as recited in claim 1 wherein every  $\text{R}^1$  and every  $\text{R}^2$  in each molecule of cyclic ester oligomer are not the same, at least two of the chemically different cyclic ester oligomers present are at least 20 mole percent of said total amount of said cyclic ester oligomers present.

6. The process as recited in claim 1 wherein a polymerization catalyst is present.

7. A process for encapsulating or coating an object, comprising, contacting said object with a molten mixture of two or more chemically different cyclic ester oligomers and copolymerizing said molten mixture to form a copolyester which encapsulates or coats said object.

8. The process as recited in claim 7 wherein repeat units within each molecule of cyclic ester oligomer are identical. *7 or 8*

9. The process as recited in claim ~~8~~ *7 or 8* at least one of said chemically different cyclic ester oligomers are derived from:

(a) a diol component selected from the group consisting of diols of the formula  $\text{HOCH}_2(\text{CR}^3\text{R}^4)_q\text{CH}_2\text{OH}$  or  $\text{HO}(\text{CH}_2\text{CH}_2\text{O})_t\text{H}$  wherein  $\text{R}^3$  and  $\text{R}^4$  are each independently hydrogen or alkyl, and  $q$  is 0 or an integer of 1 to 10, or  $t$  is an integer of 2 to 20, hydroquinone, and bisphenol-A, and combination thereof; and

(b) a dicarboxylic acid component selected from the group consisting of compounds of the formula  $\text{HO}_2\text{C}(\text{CH}_2)_n\text{CO}_2\text{H}$  wherein  $n$  is an integer of 1 to 10, isophthalic acid, substituted isophthalic acids, terephthalic acid, substituted terephthalic acids, and 2,6-naphthalenedicarboxylic acid, and combinations thereof.

10. The process as recited in claim 8 or 9 wherein at least one of said chemically different cyclic ester oligomers are derived from a combination of:

terephthalic acid with diethylene glycol, ethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol, and 1,6-hexanediol or a mixture thereof;

*OK*  
7/14/04  
per conversation  
w/ Anne R.  
Jarnholm